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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,022	10/15/2001	Albert Gordon Greenberg	104975.01	2698
26652	7590	11/30/2004	EXAMINER	
AT&T CORP. P.O. BOX 4110 MIDDLETOWN, NJ 07748			ABELSON, RONALD B	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,022

Applicant(s)

GREENBERG ET AL.

Examiner

Ronald Abelson

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2666

IDS

1. Since the Non Patent Literature was not provided, it was not considered.

Claim Objections

2. Claim 3 is objected to because of the following informalities. Line 1, the word "on" should be "one". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered

Art Unit: 2666

therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cao (US 20020181485) in view of Helles (US 6,639,895).

Regarding claim 1, Cao teaches attempting to restore communications by only communicating with at least one other communication node forwarding significant amounts of data (propagates information to source routers, pg. 2 [0011] lines 11 - 22). Note, the failed router may be the sink router.

Cao teaches attempting to restore communications by communicating with an entire network (pg. 2 [0012]). Examiner corresponds applicant's communicating with an entire network with reference's propagating failure information over the secondary as well as primary paths.

Cao is silent on attempting to restore communications within a communications node.

Art Unit: 2666

Helles teaches attempting to restore communications within a communications node (fig. 1: box SU2, signal FS, col. 6 lines 25-46). Note, Helles teaches restoring communication by rerouting traffic from SU2 to SU1 in the event of a failure.

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Cao by replacing each individual router with a node consisting of two routers that perform rerouting in the event that one of the routers is faulty. This modification can be performed according to the teachings of Helles. This would improve the system since if data can be rerouted bypassing the faulty router, upstream routers would not have to be notified.

Regarding claim 2, attempting to restore communications by only communicating with communications nodes forwarding significant amounts of data is limited to communicating with those communications nodes impacted by the communications to be restored (propagates information to source routers, pg. 2 [0011] lines 11 - 22).

Regarding claim 4, the communications node restores communication using at least one of managing peer interfaces, managing external interfaces, managing internal resources

Art Unit: 2666

(Helles: failure state configuration, col. 6 lines 25-46), and managing faults at the network edge.

Regarding claim 5, the communications node uses at least one of internal or external gateway protocols, OSPF (Cao: pg. 3 [0023]), border gateway protocol and IS-IS signals to discover a network topology.

Regarding claim 6, a network using the method of claim 1 (Cao: Sonet, pg. 2 [0011] lines 11-13).

Regarding claim 7, the communications node communicates with other communications nodes using at least one of signaling via IP packets (Cao: IP, pg. 2 [0011] lines 1-4), RSVP and CR-LDP.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Cao and Helles as applied to claim 1 above, and further in view of Dupont (US 6,724,781).

Although Cao teaches, in a Sonet network, restoring communications transmitting information between communication nodes (pg. 2 [0011] lines 11-22), the reference is silent on the type of communication path used to transmit the communication.

Art Unit: 2666

Dupont teaches a logical connection / virtual connection in a Sonet environment (col. 7 lines 50-51). Note, since the applicant's invention is in an optical environment, the examiner corresponds a "logical connection" with a "virtual connection".

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Cao and Helles by establishing logical connections / virtual connections and transmitting path failure information from a downstream router to the source node. This modification can be performed according to the standards for Sonet "provisioning" (Dupont: col. 7 lines 50-51). This would improve the system by ensuring that failure information reaches the source node.

Prior Art of Record

7. Elahmadi teaches a routing table in a Sonet environment for rerouting data in the event of a fault (col. 4 lines 32).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald


Art Unit: 2666

Abelson whose telephone number is (571) 272-3165. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RA
Ronald Abelson
Examiner
Art Unit 2666


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER
cl/8694